

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks. Claims 33 and 34 are currently cancelled without prejudice or disclaimer. Thus, claims 1, 2, 4, 7-12, 14-16, and 28-29 are pending for consideration.

§ 112 REJECTION

Claims 33 and 34 are rejected under 35 U.S.C. 112, first paragraph, as falling to comply with the written description requirement. Applicant respectfully traverses this rejection. Claims 33 and 34 have been canceled. Accordingly, withdrawal of this rejection is respectfully requested.

35 U.S.C. § 103 REJECTION

Claims 1-2, 4, 7-12, 14-16 and 28-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans et al. (U.S. Patent No. 6,001,515, hereinafter "Evans") in view of Kondo et al. (Japanese Patent Publication No. 09-318805, hereinafter "Kondo") and Kim et al (U.S. Patent No. 5,850,271, hereinafter "Kim"). Applicant respectfully traverses this rejection.

Independent claim 1 is allowable at least in that this claim recites a combination of elements, including, for example, "providing a substrate on which a plurality of unit panels and etching object layers on the respective unit panel areas are formed, each of the unit panels including a plurality of gate lines and data lines

defining a plurality of pixels, a thin film transistor in each pixel, and a pixel electrode in each pixel”, “transferring the resist in the grooves of one divided portion of the cliché on a blanket applied on a surface of a printing roll by contacting and rotating the printing roll with one divided portion of the cliché, the printing roll corresponding to respective the unit panel of the substrate”, and “applying the resist transferred on the surface of the blanket of the printing roll on the etching object layer on a corresponding unit panel of the substrate.” None of the cited references, singly or in combination, teach or suggest at least these features of the claimed invention.

In the Office Action, the Examiner stated that Kondo, in the abstract, and in paragraphs nos. [0001], [0019], [0020], [0020], and in figure 2, discloses that the intaglio (cliché) is divided into a plurality of areas (LCD pattern) corresponding to that of the divided areas of the substrate (the substrate can be a LCD color filter); i.e., the LCD pattern of the cliché (intaglio) has grooves and the claimed plurality of areas (plurality of portions), and the substrate is also an LCD filter, i.e., the grooves and the areas (portions) correspond to that of the intaglio (cliché); and thus the resist in the grooves of the first divided portion of the cliché (intaglio) is applied via the printing roll onto the corresponding first area of the LCD substrate, and the resist in the grooves of the second divided portion of the cliché (intaglio) is applied via the printing roll onto the corresponding second area of the LCD substrate, and so on. See Office Action, page 4, lines 11-20.

However, Applicant does not agree with the Examiner's statement, since this statement is not shown in the abstract, and in paragraphs nos. [0001], [0019], [0020], [0020], and in figure 2 of Kondo.

The abstract merely disclosed "[problem to be solved] This invention provided the method of fabricating a liquid crystal color filter in which the light shielding layer having high printing quality is printed in the high productivity. [solution] After the recessed part of the surface of the intaglio is filled with the ink 2 containing the ferromagnetic power, the ink is shifted from the intaglio to the surface of the blanket in a state where magnetic field is applied from the back surface of the transparent based plate 4, whereby the light shielding layer of formed".

Paragraph [0001] disclosed "[Field of the Invention]This invention relates to the manufacturing method of the liquid crystal color filter which has a light shielding layer in more detail about the manufacturing method of the liquid crystal color filter used for a liquid crystal color display."

Paragraph [0019] disclosed "The crevice of the above-mentioned intaglio is produced according to the pattern of a light shielding layer. 1-15 micrometers, the range of the depth of a crevice is 3-10 micrometers, and it is usually preferably set up according to the thickness of a light shielding layer. Since it will no longer be obtained by printing whose thickness of the ink film needed for a light shielding layer

is 1 time if the depth of a crevice is less than said range, it is not desirable. On the other hand, if the depth of a crevice exceeds said range, the light shielding layer formed will become thick too much, and a possibility that the surface smoothness on the light shielding layer itself and the surface of a liquid crystal color filter may fall will arise.”

Paragraph [0020] disclosed “The above-mentioned pattern is usually formed as lattice-like a pattern or a stripe pattern. Although the width (namely, width of a crevice) of said pattern changes with sizes of a liquid crystal color filter, generally it is preferably set up in 10-50 micrometers 5-80 micrometers. The method of carrying out a squeegee, using a doctor blade as a method of filling up the crevice of the above-mentioned intaglio with ink, the method of using screen-stencil, the method of pouring in with a dispenser (transfer pipet), the method of pouring in with a bubble jet, etc. are raised.”

Paragraph [0022] disclosed “As for the above-mentioned blanket, it is preferred that it is smooth in a surface rubber layer in order to make better surface smoothness of the surface of a light shielding layer. For example, it is suitable that 0.5 micrometer or less of surface roughness of a blanket is especially 0.3 micrometer or less. As a surface rubber layer, when hardness (spring hardness H_s of JIS K6253. 1988 printing, JIS A) uses 20-80, and silicone rubber that is especially 40-60, The ink to which transition of ink was good and it transferred from the intaglio can be

thoroughly transferred on the surface of a transparent substrate. Since ink is not divided by the blanket and a transparent substrate, it is effective in the edge of a line becoming sharp. This effect -- printing of a light shielding layer -- the width of a pattern is remarkable in printing of the fine pattern which is 50 micrometers or less."

Fig. 2 merely indicated the offset printing process that the ink 2 in the crevice of intaglio is shifted on the surface of the blanket 3 and the shifted ink is again shifted to the surface of the transparent substrate 4 from the blanket 3.

As described above, in the abstract, paragraphs nos. [0001], [0019], [0020], [0020], and figure 2 of Kondo, there is no description than an intaglio (cliché) is divided into a plurality of areas (LCD pattern) corresponding to that of the divided areas of the substrate (the substrate can be a LCD color filter); i.e., the LCD pattern of the cliché (intaglio) has grooves and the claimed plurality of areas (plurality of portions), and the substrate is also an LCD filter, i.e., the grooves and the areas (portions) correspond to that of the intaglio (cliché); and thus the resist in the grooves of the first divided portion of the cliché (intaglio) is applied via the printing roll onto the corresponding first area of the LCD substrate, and the resist in the grooves of the second divided portion of the cliché (intaglio) is applied via the printing roll onto the corresponding second area of the LCD substrate.

Thus, Kondo fails to teach or suggest at least "providing a substrate on which a plurality of unit panels and etching object layers on the respective unit panel areas

are formed, each of the unit panels including a plurality of gate lines and data lines defining a plurality of pixels, a thin film transistor in each pixel, and a pixel electrode in each pixel”, “transferring the resist in the grooves of one divided portion of the cliché on a blanket applied on a surface of a printing roll by contacting and rotating the printing roll with one divided portion of the cliché, the printing roll corresponding to respective the unit panel of the substrate”, and “applying the resist transferred on the surface of the blanket of the printing roll on the etching object layer on a corresponding unit panel of the substrate.”

Accordingly, Applicant respectfully submits that claim 1 and claims 2, 4, 7-10, and 28, which depend directly and indirectly from claim 1, are allowable over the cited references.

Independent claim 11 is allowable at least in that this claim recites a combination of elements, including, for example, “providing a substrate on which a plurality of unit panels and etching object layers on the respective unit panel areas are formed, each of the unit panels including a plurality of gate lines and data lines defining a plurality of pixels, a thin film transistor in each pixel, and a pixel electrode in each pixel”, “transferring the resist filled in the groove of the one of divided areas of the cliché onto a surface of the blanket on the printing roll by contacting and rotating the printing roll with the one of divided areas of the cliché corresponding to the unit panel of the substrate” and “applying the resist transferred on the surface of the blanket on the etching object layer on the unit panel of the substrate corresponding to the one of divided area of the cliché.” None of the cited references,

singly or in combination, teach or suggest at least these features of the claimed invention.

In the Office Action, the Examiner rejects claim 11 for the same reasons as claim 1. Applicant's arguments with respect to claim 1 are equally applicable to claim 11, and Applicant respectfully submits that claim 11 and claims 12 and 14-16 and 29, which depend directly and indirectly from claim 11, are allowable over the cited references.

Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

The Examiner is respectfully requested to enter this Amendment After Final, in that it raises no new issues but merely places the claims in a form more clearly patentable over the references of record. In the alternative, the Examiner is respectfully requested to enter this Amendment After Final in that it reduces the issues for appeal.

*Application No. 10/736,709
Amendment dated October 13, 2009
Reply to Office Action of July 13, 2009*

Docket No. 0630-1835P

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Esther H. Chong, Registration No. 40,953, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: October 13, 2009

Respectfully submitted,

By  #39,538

Esther H. Chong

Registration No.: 40,953

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant